UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,652	04/19/2001	David Kyle	TT4390	9231

7590 07/31/2009

Kelly K. Kordzik
5400 Renaissance Tower
1201 Elm Street
Dallas, TX 75270

EXAMINER	
NAWAZ, ASAD M	

ART UNIT	PAPER NUMBER
2455	

MAIL DATE	DELIVERY MODE
07/31/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID KYLE
and RODNEY SCHMIDT

Appeal 2008-004875
Application 09/838,652[1]
Technology Center 2400

Decided: July 31, 2009[2]

Before LEE E. BARRETT, JEAN R. HOMERE, and
ST. JOHN COURTENAY III, *Administrative Patent Judges*.

BARRETT, *Administrative Patent Judge*.

DECISION ON APPEAL

---

[1] Filed April 19, 2001, titled "Determining Logon Status in a Broadband Network System and Automatically Restoring Logon Connectivity."

[2] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

This is a decision on appeal under 35 U.S.C. § 134(a) from the rejection of claims 1-26 and 40-52. Claims 27-39 have been canceled. We have jurisdiction pursuant to 35 U.S.C. § 6(b).

We reverse.

STATEMENT OF THE CASE

The invention

The invention relates to automatically restoring logon connectivity in a broadband network system. A broadband network system 100, shown in Figure 1, may include one of more clients 101A-C, i.e., subscribers, connected to a web server 106 via the Internet 105 by establishing a connection to an Internet gateway 104, either directly or via a router 103. Spec. 6, ll. 20-28. The problem is that the connection between the Internet gateway 104 and a subscriber may be disconnected due to a time out or an error without warning. Spec. 8, ll. 2-4. It is stated that, typically, a new connection to Internet gateway 104 is manually made by re-logging onto the network of Internet gateway 104. Spec. 8, ll. 10-11.

The method of the invention provides for automatically restoring logon connectivity between a client and an Internet gateway. Upon establishing a initial connection between the client and an Internet gateway, e.g., an Internet Service Provider (ISP), the status of the connection, i.e., connected or disconnected, may be checked by issuing a request to access a web server, e.g., http://www.amd.com, to the Internet gateway utilizing a protocol that is normally blocked when the client is disconnected. By issuing a request utilizing a protocol that is normally blocked when the client is disconnected, the status of the connection, i.e., connected or disconnected,

may be determined by whether the request may be serviced. If the request cannot be serviced, then a subsequent connection may be established automatically by terminating the logon procedure associated with the preceding connection, and executing the logon procedure associated with the subsequent connection. Abstract.

The claims

Claim 1 is reproduced below:

> 1. A method for automatically restoring logon connectivity in a network system comprising the steps of:
>
> establishing a first connection between a client and an Internet gateway;
>
> checking status of said first connection by issuing a first request to said Internet gateway to access a web server utilizing a protocol blocked under a logged off status;
>
> determining whether said web server is accessed from said first request; and
>
> automatically attempting to establish a second connection to said Internet gateway if said web server was not accessed from said first request.

The references

Khanna	US 5,978,849	Nov. 2, 1999
Byrne	US 6,229,787 B1	May 8, 2001 (filed Nov. 25, 1996)
Raguseo	UK 2,333,671 A	July 28, 1999

The rejections

Claims 1, 14, and 40 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Raguseo.

Claims 1-10, 14-23, and 40-49 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Khanna and Byrne.

Claims 11-13, 24-26, and 50-52 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Khanna and Byrne in view of Official Notice.

Procedural history

Appellants filed two previous appeal briefs, on July 11, 2005, (1st Br.) and January 23, 2006, (2d Br.). In both instances, the Examiner reopened prosecution. Appellants filed the instant appeal and appeal brief on November 7, 2006 (3d Br.). The Examiner entered an Examiner's Answer on February 15, 2007, and Appellants filed a Reply Brief on April 11, 2007. A replacement Examiner's Answer was entered on August 10, 2007, (Ans.) to include headings for the status of amendments and the grounds of rejection to be reviewed on appeal. Appellants filed a Reply Brief on September 25, 2007, (Reply Br.). We refer to the last Examiner's Answer and last Reply Brief.

DISCUSSION

Anticipation - claims 1, 14, and 40

Issue

Have Appellants shown that the Examiner erred in finding that Raguseo anticipates claims 1, 14, and 40?

Contentions

Appellants argue that Raguseo does not disclose any of the limitations recited in claim 1 and similar language in claims 14 and 40.

Appellants argue that Raguseo does not disclose "establishing a first connection between a client and an Internet gateway" as recited in claim 1 and similar language in claims 14 and 40.

The Examiner cites to page 3, lines 30-40. Off. Action 3.

Appellants argue that this portion of Raguseo discloses establishing a communication between two nodes and does not suggest that one of the nodes is an Internet gateway. 3d Br. 5.

The Examiner responds that the "redirector" in Raguseo is the logical equivalent of an Internet gateway because, like an Internet gateway, it "facilitates the connection between a given subscriber and a remote resource (i.e. the Internet)." Ans. 11.

Appellants note that Raguseo defines a "redirector" as "software, installed on each client workstation and on each server, which enables the user of a workstation to use a remote resource in the same way of a local one." Page 2, lines 10-12. By contrast, an "Internet gateway" is a router or server that is used to connect non-IP networks to the Internet. It is argued that the Examiner fails to provide any evidence that a redirector is an Internet gateway. 3d Br. 3.

Appellants further argue that Raguseo does not disclose "checking status of said first connection by issuing a first request to said Internet gateway to access a web server utilizing a protocol blocked under a logged off status" as recited in claim 1 and similar language in claims 14 and 40.

The Examiner cites to page 3, lines 30-40; page 5, lines 18-25; and page 6, lines 1-10. Off. Action 3.

Appellants note that page 3 of Raguseo discloses detecting a fault in the communication between two nodes, page 5 discloses that communication between nodes is not possible if there is a hardware problem, and page 6 discloses that if a disconnection is detected, the association between a remote resource and its logical name is canceled. 3d Br. 5-6. It is argued that these portions of Raguseo do not disclose "checking status of said first connection [between a client and an Internet gateway]," or checking the status "by issuing a first request to said Internet gateway," or issuing a request to the Internet gateway "to access a web server," or issuing a request to the Internet gateway to access a web server "utilizing a protocol blocked under a logged off status." *Id.* at 6.

The Examiner responds that Raguseo teaches detecting a fault in the communication between two nodes by monitoring in accordance with different situations and requirements, such as a process which always stays active and performs checks at fixed time intervals, and "[t]hus the request would be one utilizing a protocol that would be unblocked in a logged on status and blocked under a logged off status." Ans. 11.

Appellants reply that the Examiner fails to provide any logical rationale for concluding that the cited passages disclose checking the status of a first connection by issuing a first request to the Internet gateway to access a web server utilizing a protocol blocked under a logged off status. Reply Br. 3.

Appellants still further argue that Raguseo does not disclose "determining whether said web server is accessed from said first request" as recited in claim 1 and similar language in claims 14 and 40.

The Examiner cites to page 3, lines 30-40, and page 6, lines 1-10. Off. Action 4.

Appellants note that page 3 discloses detecting a fault in the communication between two nodes, and page 6 discloses that if a disconnection is detected, the association between a remote resource and its logical name is canceled. 3d Br. 6. It is argued that there is no language in the cited passages that discloses determining whether a web server is accessed or whether a web server is accessed from the first request (referring to the request issued to the Internet gateway to access the web server utilizing a protocol blocked under a logged off status). *Id.* at 6-7.

The Examiner responds that Raguseo is generally directed to accessing a server and if a disconnection is detected it would mean that the connection with the server was not successful. Ans. 12.

Appellants still further argue that Raguseo does not disclose "automatically attempting to establish a second connection to said Internet gateway if said web server was not accessed from said first request" as recited in claim 1 and similar language in claims 14 and 40.

The Examiner cites to page 3, lines 30-40; page 5, lines 18-30; and page 6, lines 1-10. Off. Action 4.

Appellants argue that there is no language in the cited passages that discloses "automatically attempting to establish a second connection to said Internet gateway" nor any language that discloses automatically attempting

to establish a second connection to said Internet gateway "if said web server was not accessed from said first request." 3d Br. 7.

The Examiner finds that Raguseo teaches "automatically re-establishing the communication between said two nodes using a second of said plurality of available communication protocols." Page 3, lines 38-40.

Appellants reply that the Examiner has not addressed the limitation of automatically attempting to establish a second connection to said Internet gateway "if said web server was not accessed from said first request" (referring to the request issued to the Internet gateway to access the web server utilizing a protocol blocked under a logged off status). Reply Br. 4.

The Examiner appears to assert that the claimed invention is taught by Hotmail, Yahoo mail, G-mail, e-Bay, banking websites, Ticketmaster, and ISPs. Ans. 9-10.

Appellants argue that the Examiner does not point out where each of the claim limitations is taught by these companies and websites. Reply Br. 2. It is argued that the Examiner has a subjective opinion that a patent should not be granted, but this is not the standard for anticipation. *Id.* It is argued that if Appellants' invention is so obvious, it is astonishing that the Examiner has reopened prosecution twice. *Id.*

Facts

Raguseo describes a method and system for automatically recovering from a connection fault in a computer network. Page 1, lines 3-4.

Raguseo describes that client workstations communicate with a file server, as shown in Figure 1. In order to access remote resources at a file server from a workstation as if they were local, a "redirector" is necessary.

Page 2, lines 7-9. "A redirector is software, installed on each client workstation and on each server, which enables the user of a workstation to use a remote resource in the same way of a local one." Page 2, lines 9-12.

Raguseo describes that there are three kind of redirector, the main difference being the communication protocol used. Page 2, lines 21-32. In recent computer networks it is more and more usual to have more than one redirector and more than one protocol installed on the servers and the client workstations. Page 3, lines 17-20.

Raguseo, Figure 2, shows a Local Area Network (LAN) connected together with three different communication protocols, two of which require a dedicated network server. Page 4, lines 23-37.

Raguseo describes that communication between two nodes of a network may fail because of a problem caused by one of the redirectors or the related protocol, such as a hardware problem, loss of a server, or disconnection of one of the nodes. In the prior art, the only possible solution required human intervention to re-establish the connection through a different redirector. Page 5, lines 9-24.

Raguseo disclose a method for automatically trying to make a connection with a different protocol in connection with Figure 3. The method checks (step 301) for connection of the remote resource at fixed time intervals or, alternatively, when an access to a remote resource is requested by a workstation. If a disconnection is detected (step 303), the association between the remote resource and its logical name is canceled (step 305). Then, the association between the remote resource is re-established using another redirector (step 307). If the connection is okay ("Yes" output in step 309), the process repeats; if not, the same operations are performed

using the next available protocol (if any) ("No" output in step 309).

Page 5, line 30, to page 6, line 29.

Analysis

The Examiner states:

> The examiner has given the appellants numerous rejections, in an effort to vividly portray the examiner's position. In the past, the appellant has been granted numerous opportunities to amend their claims to overcome the examiner's rejections but to no avail. The examiner maintains that the appellant's claims are broad and thus interpreted as such.

Ans. 9.

Appellants are, of course, not required to amend their claims if they think the claims are patentable over the prior art. It appears that the Examiner considers the claims to be so broad that many rejections are possible. However, the proof is in whether the rejections can be affirmed.

The Examiner's statement that a "person with ordinary skill in the art at the time of the invention would certainly be accustomed to the system disclosed by the appellant" (Ans. 9) as evidenced by Hotmail, Yahoo mail, G-mail, e-Bay, banking websites, Ticketmaster, and ISPs, is not a statement of rejection and is not considered as such. Allegations that a claim is met by these systems, based on the Examiner's personal say-so, is not evidence nor a formal rejection.

The rejection glosses over specific claim language and does not map the claim limitations in detail onto Raguseo. While Raguseo is directed to "automatically re-establishing the communication between said two nodes" (p. 3, ll. 38-39), which language sounds like Appellants' description of

automatically restoring logon connectivity in a broadband network system, the invention is defined by the specific claim language.

Raguseo does not mention an Internet gateway and, in fact, Figure 2 is described as a LAN (p. 4, l. 23), not attached to the Internet. An Internet gateway is a specific structure. We agree with Appellants that the Examiner erred in finding that a "redirector" is an "Internet gateway." On this fact alone, the anticipation rejection must be reversed. Nevertheless, we examine the other limitations.

Raguseo does not disclose "checking status of said first connection by issuing a first request to said Internet gateway to access a web server utilizing a protocol blocked under a logged off status" as recited in claim 1. One obvious reason is that there is no Internet gateway in Raguseo. Thus, there is no connection between a client and an Internet gateway and no first request to the Internet gateway to access a web server. The Examiner fails to point out what structure corresponds to the web server. The two servers 213 and 215 in Raguseo are not described as web servers and since the LAN is not described as attached to the Internet, we fail to see how they can be characterized as web servers. The Examiner does not address the "logged off" limitation. Furthermore, the limitation calls for checking the status of a connection between a client and an Internet gateway by issuing a request to the Internet gateway to access a web server, i.e., a third entity. At best, Raguseo discloses detecting a fault by trying to communicate with a node not by trying to access some entity beyond the nodes.

Raguseo does not disclose "determining whether said web server is accessed from said first request" as recited in claim 1 because it does not

describe a web server or a first request as previously discussed. Nor does Raguseo attempt to access a web server through an Internet gateway.

Raguseo does not disclose "automatically attempting to establish a second connection to said Internet gateway if said web server was not accessed from said first request" as recited in claim 1. Raguseo teaches "automatically re-establishing the communication between said two nodes using a second of said plurality of available communication protocols." Page 3, lines 38-40. However, the Examiner fails to show that Raguseo describes an Internet gateway or a web server. Moreover, the Examiner fails to account for how the connection is being established. Raguseo tries to re-establish communication between two nodes. In the instant claim limitation, by reference to Appellants' Figure 1, the method tries to access a web server 106 on the other side of the Internet gateway104, and, if the web server 106 is not accessed, the method tries to establish a connection between the client and the Internet gateway. The Examiner does not address this distinction of three entities. Merely attempting to re-establish a connection is not sufficient to meet the claim language.

We conclude that Appellants have shown error in the Examiner's finding of anticipation.

Conclusion

Appellants have shown that the Examiner erred in finding that Raguseo anticipates claims 1, 14, and 40. Accordingly, the anticipation rejection of claims 1, 14, and 40 is reversed.

Obviousness - claims 1-10, 14-23, and 40-49

Issue

Have Appellants shown that the Examiner erred in concluding that independent claims 1, 14, and 40 would have been obvious over Khanna and Byrne?

Contentions

The Examiner finds that Khanna teaches the claimed invention except for the limitation "checking status of said first connection by issuing a first request to said Internet gateway to access a web server utilizing a protocol blocked under a logged off status." Ans. 4-5. The Examiner finds that "Byrne teaches a method in which the status of the connection is checked via an update request. (col. 7, lines 20-32)." *Id.* at 5. The Examiner concludes that it would have been obvious "to incorporate the teachings of Byrne into those of Khanna to make the system more robust." *Id.*

Appellants argue Khanna and Byrne, taking singly or in combination, do not teach any of the limitations of claim 1. Appellants argue that the combination does not disclose "establishing a first connection between a client and an Internet gateway" as recited in claim 1. It is argued that Khanna does not teach an "Internet gateway" and the Examiner provides no reasoning to support the assertion that the server in Khanna is an Internet gateway. 3d Br. 8. Appellants discuss the teachings of Khanna and argue that these teachings do not meet the claim limitations. *Id.* at 9-11.

The Examiner responds that the Internet gateway is logically equivalent to the server in Khanna. Ans. 13. The Examiner note that Khanna teaches (at col. 4, ll. 17-22) that the Internet connection may be via a third party, such as an Internet Service Provider (ISP). *Id.*

Appellants reply that this still does not teach that the server in Khanna corresponds to an Internet gateway. Reply Br. 5.

Appellants further argue that the combination of Khanna and Byrne does not disclose "checking status of said first connection by issuing a first request to said Internet gateway to access a web server utilizing a protocol blocked under a logged off status" as recited in claim 1. It is argued that Byrne determines that an end-to-end connection has failed, but there is no teaching of checking the status of a connection between a client and an Internet gateway, nor checking the status by issuing a request to the Internet gateway to access a web server. 3d Br. 9.

Appellants still further argue that the combination of Khanna and Byrne does not disclose "determining whether said web server is accessed from said first request" as recited in claim 1. It is argued that Khanna teaches determining whether a connection with the client sending the SYN segment and for the same server port is within the TW_TCB list, but nothing about determining whether a web server is accessed by the request to an Internet gateway to access a web server using a protocol blocked under a logged off status. 3d Br. 10.

Appellants still further argue that the combination of Khanna and Byrne does not disclose "automatically attempting to establish a second connection to said Internet gateway if said web server was not accessed from said first request" as recited in claim 1. It is argued that there is nothing at column 7 of Khanna which describes the limitation. 3d Br. 10-11.

Facts

Khanna

Khanna describes in the background that a Transition Control Protocol (TCP) is a connection-oriented transport protocol that maintains information about a connection's state in a data structure called a Transmission Control Block (TCB). Col. 1, ll. 43-46.

When a server actively closes a TCP connection with a client, the TCB associated with the connection is maintained by the server for a period of time, referred to as the "TIME-WAIT" state. The length of time a closed connection remains in the TIME-WAIT state is typically twice the maximum segment lifetime (MSL), which is thirty seconds. Thus, servers must allocate resources for each closed connection for a period of one minute. As connection tables fill with closed connections in TIME-WAIT state, room for new connections becomes unavailable, which degrades server performance. Col. 1, ll. 49-64.

Khanna describes establishing a TCP connection between a client and server by utilizing a control block associated with a previous connection wherein the previous connection is in the TIME-WAIT state. Abstract.

Khanna describes that a connection is initiated by a client sending a synchronize sequence number (SYN) segment. Col. 6, ll. 21-35.

Khanna describes that there are three control blocks for every TCP connection: a socket control block (socket), an Internet control block (INPCB), and a TCB control block (TCBCB). Col. 6, l. 65, to col. 7, l. 1.

Khanna describes that when a connection is closed actively, the connection lingers in the TIME-WAIT state. According to the invention, shown in Figure 5, when a server receives a SYN segment from a client

(step 100), the creation of the new control blocks is delayed (step 102), a list of connections in the TIME-WAIT state is searched to see if there is a connection from the same client sending the SYN segment and to the same server port as the requested server port (step 104). If such a connection is located ("Yes" in step 106), the INPCB associated with the connection is placed in the TCB list (step 108), only the control block fields which change from connection to connection are reinitialized (step 110), and the connection is established (step 112). If no connection is found ("No" in step 106), a new connection is created. Col. 7, ll. 1-62.

Byrne

Byrne is directed to a mechanism which provides a very fast failover in the event of a link or switch failure in an Asynchronous Transfer Mode (ATM) network. The failover time is the time between failure of one connection and the establishment of a new connection. Col. 3, ll. 18-27.

Byrne describes that ATM networks are connection oriented and virtual circuits must be set up across the ATM network prior to data transfer between users. Col. 1, ll. 35-37.

Byrne describes that typically a single connection will be set up between a source node and a destination node as shown in Figure 3. An edge switch/router 52 and a server 58 each have two physical connections to the ATM backbone, so are said to be dual homed. A connection VCC1 is established across physical links 62 and 64 through ATM switch 54. In the event of a link or switch failure along the connection path, the source node (switch/router 52) must request another ATM destination address. Once this information is provided, the source node must tear down the old connections

and signal for a new connection, which can have failover time of many tens of seconds per link. Col. 3, ll. 1-22.

Byrne describes establishing multi-homed circuits, VCC1 and VCC2, across two distinct paths, as shown in Figure 4. The forwarding table maintained by the edge/switch router 102 maintains multi-path entries. When a link or switch failure occurs, the failure in the end-to-end connection is detected by an update message, the path for the failed link is marked as invalid, and the alternate path is chosen for the rest of the session. Col. 5, l. 57, to col. 6, l. 30.

Analysis

The Examiner's reliance on Byrne is problematic. Byrne describes an ATM network which is a connection-oriented network. Col. 1, ll. 35-36. It is notoriously well known that the Internet is a packet-switched network that operates in the connectionless mode. Nevertheless, we consider Byrne for what it teaches one of ordinary skill in the art.

Khanna describes re-establishing a previous TCP connection between a server and a client, wherein the previous connection is in the TIME-WAIT state. While the communications pass through the Internet or an intranet, as shown in Figure 1, and while we assume that communications pass through an Internet gateway, and that there had to be a connection between the client and the Internet gateway, the (impliedly present) Internet gateway has nothing to do with the method of re-establishing a previous connection between a client and a server in Khanna. Therefore, Khanna does not describe "automatically attempting to establish a second connection to said Internet gateway if said web server was not accessed from said first request."

Byrne does not teach an Internet gateway and, so, does not cure the problem with Khanna. For this reason, the rejection must be reversed. Nevertheless, there are other problems with the rejection.

The Examiner finds that Byrne teaches "checking status of said first connection by issuing a first request to said Internet gateway to access a web server utilizing a protocol blocked under a logged off status," as recited in claim 1, because Byrne teaches recognizing that an end-to-end connection has failed by issuing an update message. The teaching of determining that a connection has failed does not meet the specific way of checking status of a connection or, at least, the Examiner has not explained how it does. Merely checking the status of a connection is not enough.

We conclude that Appellants have shown error in the Examiner's determination of obviousness.

Conclusion

Appellants have shown that the Examiner erred in concluding that independent claims 1, 14, and 40 would have been obvious over Khanna and Byrne. Accordingly, the rejection of claims 1, 14, and 40, and their dependent claims 2-9, 15-23, and 41-49, are reversed. The Examiner's taking of Official Notice does not cure the deficiencies in the rejection over Khanna and Byrne. Thus, the rejection of claims 11-13, 24-26, and 50-52 is also reversed.

CONCLUSION

We reverse the rejections of claims 1-26 and 40-52.

REVERSED

rwk

Kelly K. Kordzik
5400 Renaissance Tower
1201 Elm Street
Dallas, TX 75270